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ABSTRACT

Developments that laid the groundwork for the modern psychology of attitude began with early Greek philosophy. Conceptions of the cosmologists during the Golden Age of Greek Civilization and the Sophist movement served as a link between mythology and science. Contributions of British Empiricism and German Experimentalism were instrumental to the foundation of scientific psychology in the United States. The beginning of the three-phase analysis of attitude, that of cognition (thinking), affection (feeling), and conation (acting), can be traced to the time of the early Greek philosophers. Cognition, affection, and conation serve as a tripartite classification of the subuniverses for the totality of "attitude-behaviors" in human experience. This three-phase classification, first expounded by Plato, has persisted to the present time. Modern attitude theorists use these categories to analyze and describe human action and behavior just as the ancient Greek philosophers used this system of analysis to describe and explain their conceptions of the human experience. (Author)

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TWO HUNDRED YEARS OF THE PSYCHOLOGY OF ATTITUDE - 2000 YEARS OF CONTRIBUTIONS, FROM PLATO TO ALLPORT

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Early Foundations of Attitude-Behavior Research

The early Greek philosophers laid the basic foundation for what was eventually to become the 'scientific method.' The cosmologists were the earliest known group of thinkers who attempted to explain the environment that surrounded them; their explanations revolved around understanding through animism, myth, and magic. According to Hutten (1962), "Science begins with Thales . . . he exemplifies the scientist who makes a bold, unifying hypothesis but whose imagination is kept in bounds by a respect for reality" (p. 57). The beginnings of the movement away

from mythical explanations of the world toward more scientific, naturalistic observation can be attributed to the time of this early Greek philosopher-scientist, Thales.

The most extensive reaction to the magic and mythical interpretations of the cosmologists was that of the Sophists. The beginnings of empirical research date back to the Greek Sophist movement during the Golden Age of Greek civilization: 461-431 B.C. They desired to study the individual and his culture in a practical, concrete manner; they used the empirical-deductive method as their main technique of investigation. With this theoretical development, explanations of human behavior became more observational and empirical, replacing many of the past mythical notions and conceptions.

According to Zeller (1881), however, the scientific method cannot be credited specifically to Sophist philosophy; their importance lies in breaking with the cosmological explanation of the universe, which was based on myth and religious foundations. Although the Sophists questioned mythical conceptions, they did not systematically use objective and empirical analysis. The Sophists prepared the ground for the zeitgeist of scientific and philosophical thought, that would permit the development of methodological techniques and theoretical views through which the evolution of the scientific method could be developed.

> . . . for its purpose the Sophist movement was not to guarantee objective knowledge, but only subjective readiness of thought and practical versatility. This form of culture is tied to no scientific system and principle, its distinctive character appears far more in the ease with which it takes from the most various theories whatever may be useful for its temporary purpose; and for this reason it propagates itself not in separate and exclusive schools, but in a freer manner, by mental infection of different kinds (Zeller, 1881, p. 514).

Stace (1967) interpreted this period of Greek development as a time when the Sophists undermined and destroyed the beliefs in the classical interpretation of the universe according to the cosmologists, and prepared the way for such new interpretations of the weltanschauung of Socrates, Aristotle, Archimedes, and others. It was Aristotle who attempted to catalogue knowledge in a systematic form. Archimedes "anticipated the modern modes of scientific thinking in his way of dealing with general principles of nature" (Boring, 1950, p. 6). Thus, the later Greeks, successors of earlier Greek contributors, began the movement toward measurement and evaluation of the surrounding environment through quantitative methods.

Modern quantitative methodology dates back to the four basic stages in the scientific method, developed by the Greeks: (a) naturalistic observation, (b) classification and analysis of natural phenomena into meaningful descriptive categories, (c) formulation of hypotheses of cause and effect based on such analyses, and (d) the value of quantitative methodology. The Greeks extended their

studies into what can be considered the first applications of experimental hypothesis testing and critical observation. "It is to the great credit of these ancient people that they were able to develop what in essence amounts to a sophisticated scientific methodology more than 2,000 years ago" (Chaplin and Krawiec, 1968, p. 17). The methods of critical observation were prevalent in the West in the Thirteenth Century with the rediscovery of Aristotle (Crombie, 1952). The early British and German scientists in the Eighteenth Century greatly enhanced and improved on these first attempts at scientific methodology and experimentation.

Early Experimental Research, Theory and Development: British Empiricism and German Experimentalism

In search for the first experimentation that culminated with the eventual development of a systematic and methodological study of attitudes, the importance of early Greek thinking has been noted. The next prominant development in the trend that would eventuate in modern scaling techniques involved British Empiricism. This school was heavily steeped in the empirical tradition; the principle of association, first seen in Aristotelian notions, was extended by the empiricists. The general law of association, first stated by early Greek philosophers, was taken up by Hobbes and Locke in the Seventeenth Century and rediscovered years later by Hartley:

> The general law of association is that if sensations have often been experienced together, the corresponding ideas will tend to occur together; if A has been associated with B, C, and D in sensory experience, the sensory experience A, occurring alone, will tend to arouse the ideas of B, C, and D, which accompanied it (Heidbreder, 1933, p. 54).

This law laid the foundation for what was later formulated by Guttman (1959) as the 'contiguity hypothesis.' As will be seen, Guttman's hypothesis consisted essentially of a modification and reformulation of this associationistic principle applied to different realms of science, in particular that of intellectual ability and attitude research.

In Nineteenth Century Germany, new developments and theories were introduced into the scientific stream of thought which would permit the kind of research developed by Guttman (1959) and Jordan (1971). The fountainhead of the mathematical and statistical developments in German psychology can be traced to Kantian philosophy. Kant's (Peters, 1962) first crucial contribution to the German tradition of psychology, was to explicate the methods and techniques of science; his second contribution "was his contention that science is characterized by mathematical as well as by empirical description. His celebrated fusion of the empirical standpoint of Hume with the rationalist standpoint of Wolff involved the aphorism that an empirical inquiry is as scientific as it contains mathematics" (p. 533). According to Brett, (Peters, 1962) Kant molded

and directed psychology into the area of measurement which stimulated and enhanced the development of statistical and mathematical models.

Two basic trends in psychology emerged at this time; statistical-empirical on the one hand, and introspective-action on the other. The beginning of the statistical and mathematical approach to attitude measurement began with these early German experimentalist and British empiricist contributions. The concepts of Kant served as the cornerstone to the whole school of experimental psychology in that these researchers began to employ measurement and methodological techniques. In close parallel to Kant was the experimentalist, Herbart, who not only tried to formulate mathematically precise laws of consciousness, but evolved techniques whereby psychology, as a science, could employ the mathematical model (Peters, 1962).

The experimental tradition continued with the work of Weber (Chaplin and Krawiec, 1968), who served as a link between the first early attempts at experimental investigation and the beginning of experimental work in the field of psychology that lead to eventual application of these early mathematical techniques to the era of scaling and attitude research. The first major application of this new scientific methodology in the area of scaling and attitude research, was undertaken by Fechner. According to Chaplin and Krawiec (1968, p. 40), his "methods have stood

the test of time to become fundamental procedures in psychophysical measurements, mental testing, and attitude scaling . . ."

Unlike Kant, Fechner was not a strict methodologist; he had a humanistic philosophical bent along with his mathematical and scientific interest. His significance lies in the fact that he applied rigorous methods to practical, everyday functioning. This is the crux of attitude research today - to be able to make statements about behavior and behavioral change, but at the same time to be able to make these statements with some degree of validity and reliability to relevant public concerns.

According to Brett (Peters, 1962, p. 534) "the main function of measurement in science is surely to facilitate the testing of hypotheses by expressing them more exactly. Quantitative techniques enable scientists to answer precisely questions unearthed by cruder qualitative methods." This was what Fechner (Peters, 1962) attempted to do, and also what Guttman and Jordan are attempting a century and a half later. Both these attempts have employed rigorous scientific methods to understand human thought and behavior. As Brett (Peters, 1962, p. 534) has pointed out:

> there is little point in going round measuring unless the object of devising such measuring techniques is the testing of interesting hypotheses. Measurement by itself does not produce scientific hypotheses any more than do laboratories or grants for research . . . The advance of science depends upon the development of imaginative assumptions as well as upon exact techniques for testing them.

The next crucial step in the development of the psychological measurement of attitudes is found in the contribution of Wundt (Boring, 1950), considered the founder of psychology as a formal discipline. Wundt laid the foundation for modern experimental psychology. His use of experimental observation and analysis for understanding mental phenomena was the culmination of the trend begun by Weber and Fechner to utilize physiological and physical methods in psychological investigation.

Wundt provided an impetus for a new type of psychology: that of the 'new' psychology of content, otherwise understood as structural psychology. "He provided for the new psychology its structure and form, its self-consciousness, its name, its first formal laboratory, its first experimental journal, as well as the systematic pattern with respect to which the experiments could be formulated and given their significance" (Boring, 1950, p. 334).

The 'new' psychology of content can be considered introspective, sensationistic, elementistic, and associationistic. Consciousness was its subject matter; therefore, it was introspective. The nature of consciousness was revealed through sensation - thus the 'new' psychology was of a mental chemistry. Sensations, images, and feelings were thought to be the elements making up the compounds of mental thought. Lastly, because association was the very principle of compounding, the 'new' psychology was

associationistic. The British Empiricists had previously shown how perceptions and meaning can be obtained through an association of various parts. This was the early law of association postulated by Hobbes and Locke; its basic conception was carried through psychological thought and is seen in Guttman's (1959) 'law of contiguity' (Chaplin and Krawiec, 1968).

Titchener (Peters, 1962), a strict student of Wundt's, brought this 'new' psychology to America in the form of Structuralism. The idea and practice of rigorous analysis was carried through in psychology, thus making psychology more scientific and respected by the physical sciences. Titchener tightened the theory and experimentation of Wundt, while stressing the concept of 'structor' by adding a new element, affective states, to the existing states of sensations and images. These three elements, Titchener utilized in classifying what he perceived as conscious thought. All varied and complex mental processes were derived from these three elements and their attributes of quality, intensity, and duration. Titchener's structuralism gave psychology a more strict, rigorous scientific flavor, that aided in the development of more exacting measurement techniques, necessary for the birth and maturation of attitude research.

Recent Developments in Attitude Research

The beginning of this three-phase analysis of attitude, that of cognition, affection, and conation, can be traced to the time of the early Greek philosophers. "Plato . . . conceived of the mind as made up of three facilities or 'institutions.' To Plato abdomen was the seat of emotions or feeling; the breast the seat of striving and action; the head the seat of reason and thought" (Allport, 1954, p. 19). Allport (1954) stated that this trichotomy has persisted to the present time; the terms have been modified by different writers, but the meaning has been retained. Plato had classified 'mind' into:

affection (feeling), conation (striving), and cognition (thought).

Fechner was one of the first psychologists to use attitude scaling in the scientific framework. As Chaplin and Krawiec (1968) stated, his "methods have stood the test of time to become fundamental procedures in psychophysical measurements, mental testing, and attitude scaling . . ." (p. 40). Titchener, a student of Wundt, brought the new, rigorous experimentation to the American continent from Europe. He analyzed consciousness into three basic elements - sensations, images, and affective states. In general, Wundt's followers stressed the importance of feelings in analyzing attitudes. Clarke, a student of Titchener, broke attitude into three conscious phenomena: imagery, sensation, and affection. This 'new' psychology of structure concentrated on the operations and function 'within' the organism alone.

It was necessary for another aspect, that of interaction between the subject and the object, to be developed before the work of attitude-behavior research could mature. The British act psychologists, James, Ward, Dewey, Angell, and Carr were the first to study the interaction between the observer and the observed. Later, in America, Cooley and Mead took up the act psychologists' interest in the subject-object relationship, and developed the early group

psychology approach by studying the interactive system between two or more subjects.

Thomas and Znaniecki, in a 1918 publication, defined attitude as: "individual mental processes which determine both the actual and potential responses of each person in the social world." Further, they defined a social value as "any datum having an empirical context accessible to the members of some social group and a meaning with regard to which it is or may be an object of activity" (Allport, 1954, p. 45).

Ward (1920) developed an elaborate system centered around the relation of the active subject to the object. He divided the subject matter of psychology into cognition, feeling, and conation.

A predecessor of Ward, James Sully (1892), attempted to classify and divide various mental states into distinctive modes of human expression. The three modes that he conceptualized were feeling, knowing, and willing. Sully gave an example of these three states; it is clear in this example that Sully's analysis involved all three characteristics of attitude: cognition, feeling, and action. Many psychologists following him with more experimental-type work fail to include the conative element. Even when the researcher includes this element, the actual behavior of a subject toward an object is seldom enumerated. Although Sully's work was purely descriptive, he did contribute to

empirical research by emphasizing the importance of recognizing the three separate and distinct elements of attitude:

> To illustrate the difference between these modes of mental manifestation, we may select almost any example of a familiar mental experience. For instance, I see an apple on a tree. I may be affected by the beauty of its colour glowing in the midst of its cool green surroundings. Such a mental state of delightful admiration would be properly described as a feeling or affective state . . . Or, again, if I happen to be a connoisseur of apples, my mind may be stimulated by the sight of the object to note its peculiar variety to which it belongs. Such a direction of mental activity would come under the head of knowing, cognitive process or intellection . . . And, lastly, if I happen to be hot and thirsty the sight of the apply may very likely excite a desire to pluck and eat it and prompt the corresponding actions. And in this case what goes on in my mind would be a case of willing, volition, or conation. All mental processes lie under one of these heads (Sully, 1892, Vol. I, p. 60).

Sully's (1892) classification of mental processes into three separate categories can be compared to McGuire's (1969) more recent classification of these three elements as basic to attitudes. Under Intellection (McGuire-cognition), Sully included such things as: perception, memory, and thought. Under Feelings (McGuire-affection), he included: feelings (i.e., pleasure and pain), emotions (fear, sympathy, intellectual or logical feelings, aesthetic sentiment, ethical or moral sentiment). Finally, under Conation or Volition (McGuire-conation), he included: voluntary movements, desire, and habit.

Ward (1920, p. 56) anticipated Jordan's (1971) analysis of attitude-behaviors. He included the three elements of attitude, which he referred to as the three 'commonly

accepted constituents of experience,' in what appeared to be an elementary design of Jordan's (1971) mapping sentence, using the crucial subject-object relationship:

A SUBJECT
- (1) non-voluntary attending to changes in the sensory continuum: (Cognition) = Presentation of sensory
- (2) being, in consequence, either pleased or pained; (Feeling)
- (3) by voluntary attention or 'innervation' producing changes in the motor-continuum. (Conation) = Presentation of motor

OBJECTS

Ward (1920) postulated that the important contribution of this system was that it "traversed both the old bi-partite and the prevailing tripartite schemes, viz. that between the subject, on the one hand, as acting and feeling, and the objects of this activity on the other" (p. 56). McDougall also used the subject-object-activity continuum in more experimental research (Boring, 1950).

Allport (1954) indicated that 'attitude' has had more than one meaning through its historical perspective. There have been two prevalent, and at time opposing definitions of attitude: one meaning, stressing mental attitude and one, motor attitude or in Jordan's (1971) terms, one stressing "predisposition" and the second stressing "overt action" or behavior. The definition of attitude as mental activity preceded the one in which attitude was given motor

significance. The earlier definition perceived attitude as "a subjective or mental state of preparation for action." Spencer, one of the first psychologists to use the term 'attitude' wrote in First Principles, published in 1862:

> Arriving at correct judgments on disputed questions, much depends on the attitude of mind we preserve while listening to, or taking part, in the controversy; and for the preservation of a right attitude it is needful that we should learn how true and yet how untrue, are average human beliefs (Allport, 1954, p. 43).

It was not until somewhat later that the conception of attitude as an activity began to appear. In the late Nineteenth Century, N. Lange (1888) spoke of attitude referring to perception as resulting from muscular preparation or 'set.' Concurrently with this, Munsterberg (1889) and Féré (1890) developed theories that centered around motor and action type attitudes. Wundt and Titchener's contributions occurred shortly after this. "As a result of the Wurzburg work (primarily Titchener and Wundt) most psychologists came to accept attitudes, but not all believed them to be impalpable and irreducible mental elements. The students of Titchener felt that attitudes were feelings. Prior to this, the Wurzburg school attempted to use introspection to resolve the meaning of attitude" (Allport, 1954, pp. 43-44).

Attitudes were really not well represented or accepted until the time of Freud. He endowed attitudes with vitality, equating them with longing, hatred and love, with

passion and prejudice, in short, with the onrushing stream of unconscious life" (Allport, 1954, p. 44). With this analysis, plus the beginning of experimental investigation of attitude, attitude received a permanent place in the field of psychology. Credit must be given to Thomas and Znaniecki (1918) for giving attitude a permanent place in the field of sociology and sociological analysis (Allport, 1954).

In the early part of the Twentieth Century, researchers began propounding definitions of attitude that in the main included both the thinking processes of attitude and its motor aspects. Allport (1954, p. 45) cited the following as typical definitions of attitude at about this time:

> Attitude = the specific mental disposition toward an incoming (or arising) experience, whereby that experience is modified; or, a condition of readiness for a certain type of activity (Warren, 1934).
>
> An attitude is a mental disposition of the human individual to act for or against a definite object (Droba, 1933).
>
> An attitude is a mental or neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related (Allport, 1935).

Conclusion

It is the task of the social scientist to discover the structure underlying the totality of human behavior. Cognition (thinking), affection (feeling), and conation (acting) serve as a tripartite classification of the subuniverses for the totality of "attitude-behaviors" in human experience. This three-phase classification was first expounded by Plato and has persisted through history to the present time. Modern theorists use these subcategories to expound on human action and behavior just as the ancient Greek philosophers used this system of analysis to explain their conceptions of human experience.

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